

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

August 8, 2005

U. S. Army Corps of Engineers Regulatory Field Office Post Office Box 1890 Wilmington, NC 28402-1890

ATTN:

Mr. Richard Spencer NCDOT Coordinator

Subject:

Supplementary Information for Nationwide Permit 23 and 33 Application. Randolph County, Intersection Improvements to US 64/NC 49 and NC 42 in Asheboro, North Carolina, Federal Aid Project No. NHF 64(58), State Project No. 8.1572101, Division 8, WBS Element 34935.1.1, TIP Project No. U-3401.

Reference:

May 24, 2005 Application for Nationwide Permit 23 and 33.

Dear Sir:

Please find the enclosed revised copies of the construction sequences and accompanied drawings. The following amendments are included:

- 1. Increasing diversion pipe size from 18" to 24" in case of a major storm event. Using our design procedures with an urban discharge, the minimum required pipe size is 15". Due to the concerns, we feel that a 24" pipe would be appropriate. This has almost twice the cross-sectional area of an 18" (see drawings).
- 2. Impervious dikes will include two interior impervious dikes to serve as pipe support and as sediment reduction baffles (see drawings).

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Ms. Cheryl Gregory at clgregory@dot.state.nc.us or (919) 715-1489.

Sincerely,

Gregory J. Thorpe, Ph.D.

Environmental Management Director, PDEA

cc:

w/attachment

Mr. John Hennessy, NCDWQ

Mr. Travis Wilson, NCWRC

Mr. Gary Jordan, USFWS

Dr. David Chang, P.E., Hydraulics

Mr. Mark Staley, Roadside Environmental

Mr. Greg Perfetti, P.E., Structure Design

Mr. Terry Gibson, P.E., Division Engineer

Mr. Jim Rerko, Division Environmental Officer

w/o attachment

Mr. Jay Bennett, P.E., Roadway Design

Mr. Omar Sultan, Programming and TIP

Mr. Art McMillan, P.E., Highway Design

Mr. David Franklin, USACE, Wilmington

Ms. Stephanie Caudill, P.E., PDEA Project Planning

U-3401

CONSTRUCTION SEQUENCE 1 @ 7' x 7' RCBC—UNNAMED TRIBUTARY TO VESTAL CREEK 30+24.5 -Y 34935.1.1—RANDOLPH

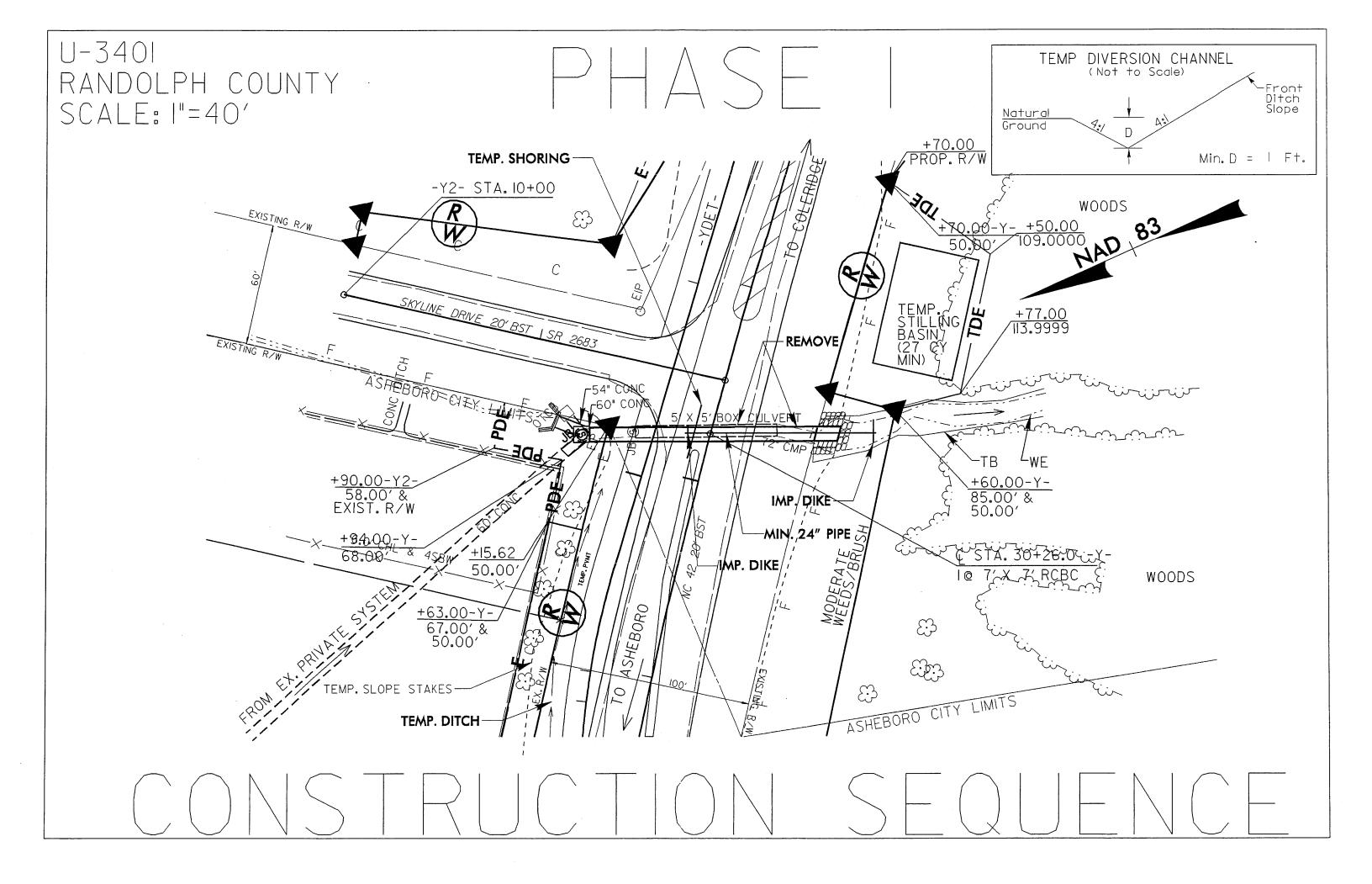
PHASE I

- 1. Construct sediment control devices.
- 2. Construct the on-site detour and temporary ditch on left side of -Y-.
- 3. Install a temporary stilling basin (27 cubic yards min.) on right side of -Y-.
- 4. Once traffic has been shifted to the on-site detour, install an 24" min. CS temporary diversion pipe with impervious dikes to carry flow from upstream of work area to an area beyond construction area.
- 5. Construct required temporary shoring.
- 6. Remove 72" CMP and 40' +/- of existing 5'x5' box culvert to allow for construction of the proposed southern portion of the culvert, while pumping effluent into stilling basin.
- 7. While traffic is maintained on the newly constructed on-site detour, construct as much of the proposed southern (downstream) portion of the culvert as possible.
- 8. Remove Phase I 24" temporary diversion pipe and impervious dikes.

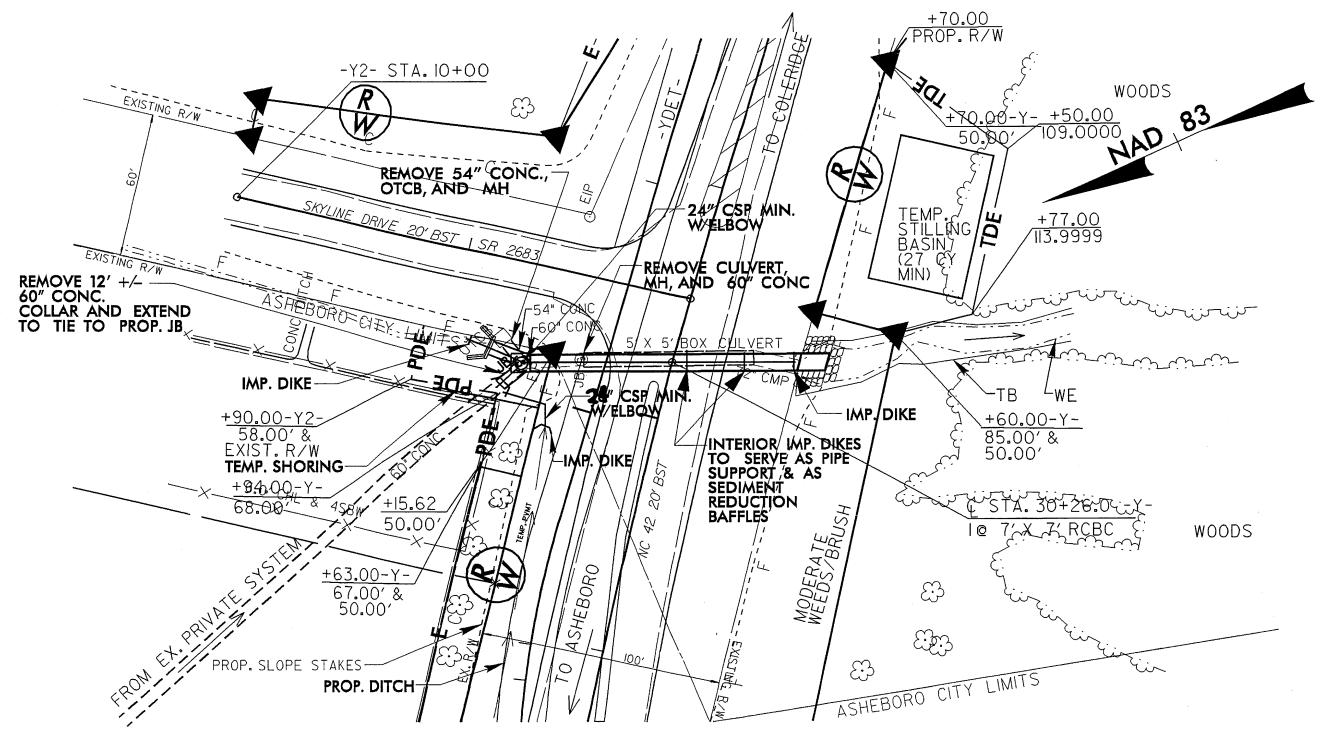


PHASE II

- 9. Construct proposed roadway right of –Y- over newly constructed culvert with required temporary shoring.
- 10. Once traffic has been shifted to the newly constructed roadway, install 24" min. CS temporary diversion pipes with wye and impervious dikes to carry flow from the existing private system and from the channel upstream of the work area to an area beyond the construction area. Impervious dikes will include two interior impervious dikes to serve as pipe support and as sediment reduction baffles.
- 11. Remove temporary pavement, as needed, from the no-longer used on-site detour, to construct the proposed ditch on the left side of –Y-. Install 18" min. CS temporary diversion pipe with elbow and impervious dike, to carry flow from ditch to upstream of the temporary diversion pipe. Construct impervious dike for the existing private system.
- 12. Remove remaining 5'x5' box culvert, 60" conc. pipe, 2 manholes, 54" conc., OTCB, and 12'+' of 60" conc. from existing private system while pumping effluent into stilling basin.
- 13. Construct the remaining northern (upstream) portion of the culvert.
- 14. Remove the temp. pipe that is carrying flow from the upstream channel and construct the proposed JB and 72" RCP open-end pipe. After proposed JB is complete, construct 2GI at STA. 29+90 –Y- and tie to proposed JB at culvert inlet. Remove temporary diversion pipe from ditch. Collar and extend 60" conc. from private system to tie to proposed JB.
- 15. Upon permanent stabilization of all disturbed areas, remove all temporary sediment control devices including temporary ditches, pipes and stilling basins.



U-3401 RANDOLPH COUNTY SCALE: I"=40'



CONSTRUCTION SEQUENCE